

REVISED CLAIMS

What is claimed is:

1. A system (10) for testing the load state of at least one device in the case of a load by a plurality of users, the device being connected to a communications network (90) based on an IP standard, comprising
at least one programmable control device (20) having an assigned memory device, in which a plurality of session scripts is able to be stored, which each contain an initialization procedure, a predefined test procedure, and a termination procedure;
at least one session computer (40, 50, 60) connected to the control device (20) and having a plurality of mutually independent connection interfaces (44₁-44_n), to each of which is assigned a script-processing device (45₁-45_n) for executing a session script assigned by the control device (20), a plurality of script-processing devices (45₁-45_n) being able to simultaneously establish independent IP connections via the connection interfaces (44₁-44_n) assigned to them, to a device (80, 100) to be tested, under the control of the session scripts suitably assigned by the control device (20), initiate test procedures, and disconnect the IP connections.
2. The test system as recited in Claim 1, wherein, in each session computer (40, 50, 60), a session-management device (46) is implemented, which supplies each selected script-processing device with the session script allocated to it.
3. The test system as recited in Claim 1 or 2, wherein each connection interface (44₁-44_n) of a session computer (40, 50, 60) has an analog or digital modem (70) assigned thereto.

4. The test system as recited in Claim 1 or 2, wherein each connection interface (44₁-44_n) of a session computer (42, 52, 62) is part of an interface card (42, 52, 62) and is connected to a concentrator, or each connection interface (44₁-44_n) has an analog or digital model (70) assigned thereto.
5. The test system as recited in one of Claims 1 through 4, wherein a plurality of session computers (40, 50, 60) are linked via a backbone network (35) to the control device (20).
6. The test system as recited in one of Claims 1 through 5, wherein each session computer (40, 50, 60) includes a memory for storing status data of each device to be tested and results and preset status messages of each initiated test procedure.
7. The test system as recited in Claim 6, wherein assigned to the control device (20) are a display device for displaying the status data on each device to be tested, stored in each session computer, and the results and status messages of each initiated test procedure, an analysis device, as well as a keyboard.
8. The test system as recited in one of Claims 1 through 7, wherein the communications network (90) based on an IP standard is the Internet or an Intranet, and the devices (80, 100) to be tested are access routers and/or servers.
9. The test system as recited in one of Claims 1 through 8, wherein a session script may include a user ID, a user password, at least one service based on the IP standard, defined time sequences, repetition rates, and/or the destination address of the device to be tested.

10. A method for testing the load state of at least one device in the case of a load by a plurality of users, the device being connected to a communications network (90) based on an IP standard, comprising the following method steps:

- writing a plurality of session scripts, which each include an initialization procedure, a predefined test procedure based on an IP standard, and a termination procedure;
- storing the session scripts in a control device (20);
- selecting at the control device (20) a plurality of mutually independent connection interfaces (44_1-44_n) of at least one session computer (40, 50, 60), to each of which is assigned a script-processing device (45_1-45_n);
- loading appropriate session scripts by the control device (20) into the script-processing devices (45_1-45_n) assigned to the selected connection interfaces (44_1-44_n);
- the script-processing devices (45_1-45_n) assigned to the selected connection interfaces (44_1-44_n) simultaneously initialize a plurality of independent IP connections to a device (80, 100) to be tested, under the control of the loaded session scripts, start the corresponding test procedures, and establish the IP connections;
- each test procedure initiated with respect to the device (80, 100) to be tested, is logged, and predefined status and/or error messages are transmitted during the running test procedures to the control device (20) in order to be able to monitor the running test procedures.